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10/018,823	04/24/2002	Motoki Kato	450101-03303	1737

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William S Frommer  
Frommer Lawrence & Haug  
745 Fifth Avenue  
New York, NY 10151

EXAMINER
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HARVEY, DAVID E

ART UNIT	PAPER NUMBER
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2621

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/018,823	<b>Applicant(s)</b> KATO ET AL.	
	<b>Examiner</b> DAVID E. HARVEY	<b>Art Unit</b> 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 21 January 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 April 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/19/2001</u> .  | 6) <input type="checkbox"/> Other: _____                          |

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**1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.**

**2. The following is a quotation of the second paragraph of 35 U.S.C. 112:**

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

**3. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.**

1) In claim 1, line 5, it is not clear as to what the expression "of a domain" refers; i.e., a "domain" of what? Clarification is needed. Similar clarification is needed in line 3 of claim 6, line 3 of claim 7, line 3 of claim 8, line 5 of claim 12, line 6 of claim 13, line 5 of claim 14, line 5 of claim 15, line 5 of claim 16, line 7 of claim 17, lines 3 of claim 18, line 6 of claim 19.

2) In line 10 of claim 16, "said reproducing means" has not antecedent basis and is indefinite because it is not clear to what it refers. Clarification is needed.

3) The preamble of claim 19 suggests that the claim is directed to a recording medium having a "program" [computer program (i.e., software)] stored thereon. However, the body of the claim, i.e., lines 6-10, fails to define the structure of the medium and/or the processing that the programming causes the apparatus to execute. Clarification is needed.

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**4. 35 U.S.C. 101 reads as follows:**

**Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.**

**5. Claims 14, 16, 18 and 19 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.**

**A) With respect to claims 14 and 18:**

A "computer program" per se, e.g., a program not claimed as being embodied on by a recording medium, constitutes non-functional descriptive material and is non-statutory.

**B) With respect to claim 16:**

In order to be eligible under Section 101, a "process"/method claim, i.e., a claim that recites a series of steps or actions, must:

1) Be "tied" to another statutory category, such as a particular apparatus,

or

2) "Transform" an article or material to a different state or thing.

For example, as recently underscored by the circuit court, with reference to past Supreme Court decisions:

**"[t]he Supreme Court has recognized only two instances in which such a method may qualify as a section 101 process: when the process 'either [1] was tied to a particular apparatus or [2] operated to change materials to a 'different state or thing.'"** See PTO Supp. Br. 4 (quoting *Flook*, 437 U.S. at 588n.9). In *Diehr*, the Supreme Court confirmed that a process reciting an algorithm could be statutory subject matter if it: **(1) is tied to a machine or (2) creates or involves a composition of matter or manufacture.**<sup>12</sup> 450 U.S. at 184." (emphasis added)

*In re Comiskey*, 84 USPQ2d 1670, 1678. (Fed. Cir. 2007)

Instant method claim 15 is directed to non-statutory subject matter because, as recited, the claims:

1. Are not tied to another statutory class (such as a particular apparatus), and

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2. Do not transform underlying subject matter (such as an article or materials) to a different state or thing.

Here is noted that the instant specification indicates that the method claims encompass software implementations per se (note the last 5 lines on page 137 of the instant specification). Note, that it is not clear as to what “said reproducing means refers (see paragraph 3 of this Office action) and, as such, it is maintained that this recitation is insufficient to tie the method to another statutory class.

**C) With respect to claim 19:**

The examiner contends that the body of claim 19 (i.e., lines 6-10), at best, constitutes a non-functional description of what information on the recorded on the medium represents. Such non-functional descriptive material constitutes non-statutory subject matter; i.e., the recitation does not set forth “a logical or physical relationship among data elements, designed to support specific manipulation functions” as is required of a “data structure”.

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**6. Claims 1-19 are objected to because of the following informalities:**

A) The examiner notes that throughout the claims, various terminologies are preceded by the expression “the” wherein the terminologies do not have clear antecedent basis and do not appear to be implicit/inherent in prior recitations. For example: “the Clip information” in line 2 of claim 1; “the Playlist information” in lines 3 of claim 1; “the start address information” in line 5 of claim 1; “the time information” in lines 7 and 8 of claim 1; etc,...

Clarification could be made by deleting “the” in such cases. Fore example, by changing claim 1 to read:

--1. An information processing apparatus for recording an AV stream on a recording medium adapted for recording said AV stream, [the] Clip information for managing the entity of the AV stream and [the] PlayList information managing the reproduction of the AV stream, comprising:

means for generating [the]

-start address information of a domain in which the encoding information in said AV stream is continuous, [the]

- information correlating [the] time information in said AV stream and the address information, and [the]

-time information of a characteristic picture in said AV stream;  
and

means for recording the information generated by said generating means as said

Clip information on said recording medium.—

Similar clarifications are needed throughout the claims.

Appropriate correction is required.

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**7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:**

**A person shall be entitled to a patent unless –**

**(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.**

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**8. Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by US Patent #7,076,153 to Ando et al.**

**I. Preface:**

For reasons addressed in paragraph 6 above, claim 1 has been construed as at least encompassing the following interpretation:

“1. An information processing apparatus for recording an AV stream on a recording medium adapted for recording said AV stream, [the] Clip information for managing the entity of the AV stream and [the] PlayList information managing the reproduction of the AV stream, comprising:

means for generating [the]

-start address information of a domain in which the encoding information in said AV stream is continuous, [the]

- information correlating [the] time information in said AV stream and the address information, and [the]

-time information of a characteristic picture in said AV stream;  
and

means for recording the information generated by said generating means as said Clip information on said recording medium.”

**II. Ando et al. (applied):**

As shown in figure 14, Ando et al disclosed an information processing apparatus for recording AV streams on a recording medium (@ 50), wherein the apparatus comprises:

A) Circuitry (e.g., @81-83) for receiving AV streams;

B) Circuitry (e.g., @79 and 80) for encoding selected “continuous” AV streams into a desired signal format for recording on the recording medium (@ 50), wherein the desired signal format includes:

1) The selected “continuous” AV stream itself; and

2) Locally generated management information corresponding thereto;

and



C) **Means for recording** (e.g., @ 51) the encoded streams on said recording medium (e.g., lines 1-4 of column 32).

[Note: Claim 2 @ lines 42-64 of column 31 and lines 1-5 of column 32; Lines 11-29 and 56-65 of column 5; and Lines 1-28 of column 8].

As described, the circuitry for encoding (e.g., @79 and 80) includes **means for generating** management information wherein the management information includes "Clip" information, e.g., information associated with respective cells of the AV stream being recorded, wherein this Clip information includes the table of information shown in Figure 8 that comprises:

- A) **Start address information** (i.e., the "Start Address of Cell");
- B) **Information for correlating** the time information in the selected AV stream (i.e., "STC Value or PCR Upon Recording Head of Cell of Interest") and the start address information (i.e., the "Start Address of Cell") [i.e., the correlation being provided by the table information itself]; and
- C) **Time information** of a characteristic picture in said AV stream (e.g., the "Start Address of I-Picture #1");

wherein this generated table of information (Figure 8) is recorded on the recording medium (@ 50) by the recording means (@ 51).

\*\*\*\*\*

*For the record, it is noted that the management information is provided with information for converting logical addresses of the data into physical addresses [e.g., lines 26-53 of column 12].*

**9. Claims 5-8 is rejected under 35 U.S.C. 102(e) as being anticipated by US Patent #7,076,153 to Ando et al for the same reasons cited above with respect to claim 1. Additionally:**

A) With respect to claim 5:

The selected AV streams that are recorded in Ando et al. are MPEG transport streams (note figures 1-3).

B) With respect to claims 6 and 8:

Since the cells in the recorded AV streams are continuous the STC codes of the transport stream are inherently continuous too – i.e., wherein, as noted above, the start addresses correspond thereto.

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C) With respect to claim 7:

The examiner contends that the respective streams represent cells of a desired TV program and is therefor "constant" (i.e., at least for the period in which the TV program occurs).

**10. Claim 12 is rejected under 35 U.S.C. 102(e) as being anticipated by US Patent #7,076,153 to Ando et al for the same reasons cited above with respect to claim 1.**

**11. Claim 15 is rejected under 35 U.S.C. 102(e) as being anticipated by US Patent #7,076,153 to Ando et al for the same reasons cited above with respect to claim 1. Additionally:**

As shown in figure 14, Ando et al disclosed an information processing apparatus for reproducing the recorded cording AV streams from the recording medium (@ 50).

**12. Claim 16 is rejected under 35 U.S.C. 102(e) as being anticipated by US Patent #7,076,153 to Ando et al for the same reasons cited above with respect to claim 15.**

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**13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:**

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).**

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**14. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #7,076,153 to Ando et al.**

Ando et al. discloses a system as was set forth above for claim 1. Claim 13 differs from the showing of Ando et al. only in that claim 13 recites a recording medium that has a program stored thereon which performs the processing. The examiner takes Official Notice that it was notoriously well known in the art to have implemented recording/reproducing devices of the types described by Ando et al. using a general purpose computer with software provided thereto. Such implementations were known to be advantageous in that the reduced production costs. It would have been obvious to one of ordinary skill in the art to have implemented the recording/reproducing apparatus in Ando et al. using a software driven general purpose computer to obtain cost efficiencies advantages associated therewith.

**15. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #7,076,153 to Ando et al. for the same reasons that are set forth above for claim 13.**

**16. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #7,076,153 to Ando et al.**

Ando et al. discloses a system as was set forth above for claim 16. Claim 17 differs from the showing of Ando et al. only in that claim 17 recites a recording medium that has a program stored thereon which performs the processing. The examiner takes Official Notice that it was notoriously well known in the art to have implemented recording/reproducing devices of the types described by Ando et al. using a general purpose computer with software provided thereto. Such implementations were known to be advantageous in that the reduced production costs. It would have been obvious to one of ordinary skill in the art to have implemented the recording/reproducing apparatus in Ando et al. using a software driven general purpose computer to obtain cost efficiencies advantages associated therewith.

**17. Claims 18 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent #7,076,153 to Ando et al. for the same reasons that are set forth above for claim 17.**

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**18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID E. HARVEY whose telephone number is (571) 272-7345. The examiner can normally be reached on M-F from 6:00AM to 3PM.**

**If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Marsha D. Harold-Banks, can be reached on (571) 272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.**

**Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).**

**/DAVID E HARVEY/**

**Primary Examiner, Art Unit 2621**

DAVID E HARVEY  
Primary Examiner  
Art Unit 2621